

Department of Energy

Richland Operations Office P.O. Box 550 Richland, Washington 99352

02-RCA-022

OCT 29 2001

Ms. Laura E. Ruud Nuclear Waste Program State of Washington Department of Ecology 1315 W. Fourth Avenue Kennewick, Washington 99336



Dear Ms. Ruud:

EDMC

RESPONSE TO THE STATE OF WASHINGTON DEPARTMENT OF ECOLOGY'S (ECOLOGY'S) COMMENTS FROM REVIEW OF THE U.S. DEPARTMENT OF ENERGY (DOE) CALENDAR YEAR (CY) 2000 LAND DISPOSAL RESTRICTIONS (LDR) REPORT, SUBMITTED IN ACCORDANCE WITH THE HANFORD FEDERAL FACILITY AGREEMENT AND CONSENT ORDER (TRI-PARTY AGREEMENT) INTERIM MILESTONE M-026-01K

References:

- (1) Ecology ltr. to K. A. Klein, RL, and H. L. Boston, ORP, from L. E. Ruud, "Ecology's Review and Response to the United States Department of Energy (USDOE) 2001 (Calendar Year 2000) Land Disposal Restriction (LDR) Report, submitted in accordance with M-26-01K," dtd. September 27, 2001.
- (2) RL ltr. to D. R. Sherwood, EPA, and M. A. Wilson, Ecology, from W. W. Ballard, "Final Calendar Year (CY) 2000 Land Disposal Restrictions (LDR) Report, 01-RCA-337, dtd. June 28, 2001.
- (3) RL ltr. to M. A. Wilson, Ecology, from S. H. Wisness, "Supplemental Information to the Response to State of Washington Department of Ecology (Ecology) September 28, 2000, Primary Document Comments Regarding the Interim Land Disposal Restriction (LDR) Report Submitted in Accordance with Milestone M-26-01J," 01-A&E-032, dtd. December 20, 2000.
- (4) Ecology Itr. to R. T. French, ORP, and K. A. Klein, RL, from T. Fitzsimmons, Ecology, and C. Clarke, EPA, "Final Determination pursuant to the Hanford Federal Facility Agreement and Consent Order (HFFACO) regarding the U.S. Department of Energy's (DOE) compliance with Land Disposal Restriction (LDR) requirements of Washington States Hazardous Waste Management Act (HWMA) and the federal Resource Conservation and Recovery Act (RCRA), DOE's annual Land Disposal Restrictions Report, and HFFACO milestone M-26-01," dtd. March 29, 2000.

As a follow-up to your September 27, 2001, letter, the U.S. Department of Energy, Richland Operations Office (RL) and the U.S. Department of Energy, Office of River Protection (ORP), in conjunction with the Hanford Site Contractors, reviewed Ecology's comments and proposed actions on the CY 2000 LDR Report. The CY 2000 LDR Report was submitted to Ecology and the U.S. Environmental Protection Agency (EPA) on June 28, 2001, as a Tri-Party Agreement primary document in accordance with Tri-Party Agreement Milestone M-026-01K and the March 29, 2000, "Final Determination for compliance with LDR Requirements." Ecology's September 27, 2001, letter stated that the CY 2000 Report was incomplete and did not meet the requirements of the Tri-Party Agreement or the Final Determination.

As a primary document, the Tri-Party Agreement Action Plan, Chapter 9, requires that the lead regulatory agency (in this case Ecology) has 45 days to respond to a primary document (unless that time frame has been extended by them). Upon receiving written comments from the lead regulatory agency, DOE will update the document, if feasible, and/or respond to comments. In accordance with the Tri-Party Agreement Action Plan, a response to comments was prepared and included as an enclosure to this letter.

DOE appreciates Ecology's recognition that the LDR Report does contain new, needed, and helpful information. DOE and the contractors have worked diligently to make what we believe are monumental changes to the LDR Report.

The Response to Comments is enclosed (Enclosure 1). Responses are provided for each of Ecology's comments/actions. In addition, specific page changes to the CY 2000 LDR Report are also included as Enclosures 2 through 7. When the Response to Comments and associated page changes are approved by Ecology, Enclosures 2 through 7 will be distributed to the CY 2000 LDR Report recipients.

DOE welcomes the opportunity to meet with Ecology to discuss the responses and provide clarification where needed. Astrid Larsen, of my staff, will coordinate the meeting and ensure that the appropriate DOE and contractor staff are available as well. Further questions, concerns, or comments should be addressed to Astrid Larsen on (509) 372-0477 or Greg Sinton, Waste Management Division, on (509) 373-7939.

Sincerely,

Joel B. Hebdon, Director

Toel Hebdon

Regulatory Compliance and Assessment

RCA:APL

Enclosures

cc: See page 3

cc w/encls:

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L. J. Cusack, Ecology

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M. A. Wilson, Ecology

Administrative Record

Environmental Portal, LMSI

ENCLOSURE 1

CY 2000 LDR REPORT (Tri-Party Agreement Milestone M-026-01K)
Response to the State of Washington, Department of Ecology's Primary Document Comments

Response to the State of Washington, Department of Ecology's Primary Document Comments

Responses to primary document comments and proposed actions are listed below with the response highlighted.

General Comment

Comment #G-1: As noted in Ecology's January 25, 2000 letter, "Response to DOE Request for Clarifications," USDOE's annual LDR Report does not need to include identification of mixed waste actively managed in satellite or 90-day accumulation areas. However, several Location Specific Data Sheets for satellite and 90-day area wastes were included in the CY 2000 LDR Report, e.g., MLLW-02 (324, 327, PFP, Tank Farm, WSCF), MLLW-03 (324, 327, PFP, Tank Farm, WSCF), and MLLW-04A (324, Well Debris, Hexone Filter).

Action #G-1: Within 45 days, USDOE may chose to revise the CY 2000 LDR Report to exclude identification of mixed waste actively managed in satellite or 90-day accumulation areas. This is not a required change.

Response #G-1: The LDR Report is required to include information on estimates of future waste generation, by generating location. The Location Specific Data Sheets referred to in the Ecology comment do not reflect a current inventory, but do include a projection for future generation. Location specific data sheets on waste managed or to be managed within accumulation areas were included in the interest of providing complete information on future generation of waste and the associated location-based information. Inclusion of this type of information was based on DOE/contractor understanding of what was acceptable to Ecology. No change to the report is planned in response to this comment.

Identify and describe all mixed waste at Hanford

Comment #1-1: Page 2-13, second set of bullets, states in part that generated mixed wastes are included in the treatability group and location-specific data sheets rather than in the Potential Mixed Waste Table; however, some of the location-specific data sheets state that the waste has not been generated. For example, under the TRUM-0CH/PFP/234-5Z MHPP Solids, USDOE reports that 600 drums of this waste stream exist, yet have not been generated. Ecology's expectations are that the plutonium solutions as mixed waste and must be included as mixed waste in the CY 2000 LDR Report, along with associated schedules and milestones for characterization, storage, and treatment, as needed. (Final Determination, Section IV.A.1)

Action #1-1: Within 45 days, please review the accuracy of the data sheet and the Potential Mixed Waste Table in the CY 2000 LDR Report and revise as needed to include all generated mixed waste streams at Hanford and all potential mixed waste streams at Hanford.

Response #1-1 Ecology is correct in stating that generated mixed wastes are included in the Treatability Group Data Sheets and Location Specific Data Sheets rather than in the Potential Mixed Waste Table. Also included in the Treatability Group data Sheets and Location Specific

Data Sheets is information on waste that is yet to be generated within the next five years, this is the case with the Transuranic Mixed-Waste (TRUM)-CH/PFP/234-5Z MHPP Solids. The CY 2000 LDR Report reflects information as of December 31, 2000 and at that time, RL did not consider these solids to be waste. Negotiations continue to take place on the status of these and other materials at PFP. The CY 2001 LDR Report will accurately reflect the outcomes of these negotiations as applicable to the report (and is consistent with the data reporting date of December 31, 2001).

Ecology's statement that the USDOE reports that 600 drums of this waste stream exist is incorrect. The data sheet states that there are 600 containers that contain material.

No change to the report is planned in response to this comment.

Comment #1-2: Page B-50, Section 2.9, asks, "Has there ever been any non-permitted, unauthorized release of this stream to the environment." The box "no" was checked, yet the summary provided indicates that a release was identified in April 1998. (Final Determination, Section IV.A.1)

Action #1-2: Within 45 days, please revise the CY 2000 LDR Report, as needed, to accurately reflect the information requested on page B-50, Section 2.9.

Response #1-2: There was no release. In April 1998, DOE reported anomalous materials contained in drums that were excavated from the 618-4 Burial Grounds, in accordance with a Comprehensive Environmental Response Compensation and Liability Act record of decision (ROD). The ROD acknowledged minimal data and numerous gaps in historical records associated with this site. Consequently, an observational approach had been used at this location and was a factor in making the notification decision. In retrospect, a notification in connection with the work at this site was determined by the project and the local EPA office to be unwarranted. A revised datasheet, removing the text in Section 2.9, is included as Enclosure 2.

Comment #1-3: Page B-80, Section 3.3.4, asks, "Does this waste stream contain PCBs?" No information was provided in this section. (Final Determination, Section IV.A.1)

Action #1-3: Within 45 days, please revise the CY 2000 LDR Report, as needed, to accurately reflect the information requested on page B-80, Section 3.3.4.

Response #1-3: The datasheet should be marked yes and is included as Enclosure 3. This data will be re-evaluated for subsequent LDR reports.

Comment #1-4: Page B-596, Section 3.3.4, asks, "Does this waste stream contain PCBs?" No information was provided in this section. (Final Determination, Section IV.A.1)

Action #1-4: Within 45 days, please revise the CY 2000 LDR Report, as needed, to accurately reflect the information requested on page B-596, Section 3.3.4.

Response #1-4: The datasheet should be marked "no" based on information available as of

December 31, 2000, and is included as Enclosure 4. This data will be re-evaluated for subsequent LDR reports.

Comment #1-5: Page C-1 and C-2, Table C-1. Early in 2001, USDOE provided training to generators on how to identify potential mixed waste at their facilities. The training included overheads with column-by-column explanations on how to complete the Potential Mixed Waste Table. However, the explanations presented in the CY 2000 LDR Report are different than what was provided in training to generators. For example, in the content definition for columns D and E, the word "stuff" has been replaced with "materials." In Ecology's and USDOE's collaborative effort to identify mixed waste, the word "stuff" had a deliberate meaning in the context of developing the potential mixed waste table, i.e., it was intended to be used as a neutral word that would allow USDOE and Ecology to move forward with adequately identifying potential mixed waste without getting into the argument of material versus waste. The content definition for columns G and H has also been altered, eliminating elarification as to when materials detailed in the table will become waste (Column G), and the inclusion of existing schedules and funding profiles (Column H). (Final Determination, Section IV.A.1)

Action #1-5: Within 45 days, please revise the CY 2000 LDR Report to accurately reflect the information provided by USDOE during their training of generators.

Response #1-5: Ecology is correct in stating that the explanations in Table C-1 are different from information provided in overheads presented to generators in early 2001 (January 9, 2001). It is also agreed that the term "Stuff" was deliberately used as a "neutral" word in the negotiations to allow the Potential Mixed Waste Table (PMWT) to be developed as a compromise to avoid litigation that appeared to respect both Ecology and Department of Energy interests related to what "stuff" might be included in the report, and how.

The intent of the Department of Energy is not to include any mixed waste in the PMWT. Only materials and solid wastes that may become mixed waste at some future date are to be included. If waste is believed to be mixed waste, it is included as such in the applicable portions of the report such as the datasheets, rather than in the PMWT. Since the PMWT does not include mixed waste, DOE believes the reference to Section IV.A.1 of the Final Determination is not appropriate nor a requirement.

A revised Table C-1 is enclosed (Enclosure 5) changing columns D and E. The changes were not made specifically to match the overheads from January 2001 because development of the PMWT was a continuing process, with Ecology involvement, that continued beyond January 2001 in an effort to make the instructions as clear and accurate as possible. In addition, the instructions included in the report are intended to be in a concise form and do not include many examples and other scenarios that were discussed with various parties throughout the preparation process for the PMWT. A copy of the PMWT, with instructions, was provided to Ecology for review on January 4, 2001, and another update of the PMWT was provided for review on March 12, 2001. Comments received from Ecology January 19, 2001 on the January 4, 2001 draft indicated that the format of the table was acceptable. Comments received from Ecology on the March 12, 2001 review package did not include comments on the PMWT. Based on these reviews, the table instructions were believed to be satisfactory, however changes to Table C-1 have still been made for clarification and to be more consistent with the PMWT

instructions referenced above. The term "stuff" has generally replaced the term "material" in the revised Table C-1 column D and E content definitions in response to the Ecology request, however USDOE would welcome further discussion on the use of more definitive wording, if possible, in the next report.

The content definition for column G has not been modified. As indicated above, the development of the instructions was a continuing process beyond January 2001. The January 2001 overhead indicated, in part, "Include any schedule information relative to materials detailed in the table (for example, when it will be managed as waste)." The current instructions are consistent with this intent but, as indicated above, are in a concise form that did not specifically include that example. If such a date was well established for a stream, that date would be appropriate to include in column G under the current instructions.

The column H content definition was also not modified in the revised Table C-1 since it is identical to the instructions provided 1/4/01 as described above, and in later versions of the PMWT instructions. These instructions are consistent with the intent of the content description from the January generator familiarization session overhead, which simply include some additional examples of possible entries. For the particular case of "...existing schedules and funding profiles..." the intent of the overhead was to indicate that if this information was available and was important relative to establishing when negotiations on that particular material should occur, it should be included. The intent was not that schedules and funding profiles be provided for all entries in the table.

Comment #1-6: Pages C-3 through C-37, Table C-2, Potential Mixed Waste. Column F does not provide schedules for all units of when USDOE assessments will be conducted per agreed-upon procedures (reference 6). (Final Determination, Section IV.A.1 and 2)

Action #1-6: Within 45 days, please revise Table C-2 to include specific schedules for the performance of these assessments at each unit without such a schedule.

Response #1-6: It was DOE's understanding from the negotiations that the 3-year rolling schedule would be provided in the text of the report. These schedules were then included in the Potential Mixed Waste Table. There was no agreement to schedule an assessment for all entries in the Potential Mixed Waste Table. Since the PMWT does not include mixed waste, DOE believes the reference to the Final Determination, Section IV.A.1, as a requirement, is not appropriate.

No change to the report is planned in response to this comment.

Comment #1-7: Pages C-3 through C-37, Table C-2, Potential Mixed Waste, Columns D and E. Ecology has questions regarding identification of potential mixed waste and associated future use, specifically, the criteria used by USDOE to determine when the "material" or "solid waste" undergoes a dangerous waste designation in accordance with WAC 173-303. (Final Determination, Section IV.A.1)

Action #1-7: Within 45 days, please provide Ecology with the following: 1) the criteria USDOE uses to determine when the "material" or "solid waste" undergoes a dangerous waste

designation in accordance with WAC 173-303; 2) a specific date by which these determinations are to be made and appropriate justifications to support the proposed dates; 3) any information as to how future use is determined or defined, e.g., the timeframes in which the option for future use must be decided; 4) the "clear use or path for reuse/recycling" that has been established for the potential mixed wastes in Column E.

Response#1-7: The requirement source cited as a basis for this comment is incorrect. The Potential Mixed Waste Table is not subject to the requirements contained in the Final Determination. A response is provided, however, for the four items contained in the requested action. No changes to the report are planned in response to this comment.

Response #1-7.1: A material must first become a solid waste (see WAC 173-303-016) to be considered for a waste designation. The Potential Mixed Waste Table contains some items that may be used and are not considered to be waste. A solid waste is subject to the waste designation process in accordance with WAC 173-303-070, when appropriate, to determine the course of treatment and/or disposal. Some solid wastes are excluded from the waste designation process (e.g., recycled materials that are solid wastes managed under WAC 173-303-120[2]).

Response #1-7.2: Specific dates cannot be provided regarding waste designation of all items contained in the Potential Mixed Waste Table since they have not yet been determined to be a "solid waste" or have not been actively managed. Where dates are available, and have been planned for, they are provided.

Response #1-7.3: Future use of a material is determined based on a number of factors. These factors can include, but are not limited to, mission or future mission of the Hanford Site, mission or future mission of a particular Hanford Site project or building/structure, condition of the equipment, recycling options available, and reuse options available (DOE Property Management 41 CFR Chapter 109). There are no timeframes unless the speculative accumulation provisions of WAC 173-303-016 apply. When dates are available or have been planned for, the dates have been provided.

Response #1-7.4: The clear use or path for reuse/recycling for a particular material is a case-by-case decision at the time the material will be managed based on the options available. Recycling and reuse options change over time. Options at any given time are based on availability of options within and outside the DOE system. For example, DOE has in the past imposed a moratorium on scrap metal shipments. In other cases, new ideas/technologies for recycle/reuse have emerged and were implemented in the DOE system. New commercial options also may become available.

Comment #1-8: There is no Treatability Group Data Sheet or Location Specific Data Sheet for the Hexone Tanks (276-S-141 and 276-S-142). (Final Determination, Section IV.A.1)

Action #1-8: Within 45 days, please revise the CY 2000 LDR Report to include a Location Specific Data Sheet for the Hexone Tanks, and revise or create, as needed, the associated Treatability Group Data Sheet.

Response #1-8: The Location Specific Data Sheet for the Hexone Storage and Treatment Facility (Hexone Tanks) is provided in Volume 1 of the CY 2000 Report on pages B-386 through B-389 and was included as part of the MLLW-04A Treatability Group. The Hexone Tank waste stream included in the MLLW-04A group accounts for the waste generated as a result of operating the nitrogen purge system for the tanks. A Treatability Group Data Sheet was not prepared for the Hexone Tanks because all pumpable liquids have been removed from the Hexone Tanks and therefore is not a quantifiable waste inventory to report. However, the tanks and identification of their heel contents are included in Table C-2, Potential Mixed Waste Table, on page C-35 with the REDOX entry. This approach of only including pumpable liquid quantities in the data sheets was used to account for Hanford tanks are included in the report. No change to the report is planned in response to this comment.

Comment #1-9: MLLW-04a and MMLW-05: On the Treatability Group Data Sheets, the regulated contaminant lists, table 3.3.2, do not contain waste codes D041 and D039, which appear on the DST Part A, Form 3. (Final Determination, Section IV.A.1)

Action #1-9: Within 45 days, please review the assignment of waste codes to the MLLW-04A Treatability Group Data Sheet, and revise the CY 2000 LDR Report, as needed.

Response #1-9: The D039 waste code is included in Table 3.3.2 for both MLLW-04A and MLLW-05. Ecology clarification is requested to understand/clarify the comment.

The waste number D041 does not appear for treatability groups MLLW-04A and MLLW-05 because this waste number is not assigned as part of the designation for waste reported in these treatability groups. This waste number, as well as many of the other waste numbers representing other characteristic waste potentially assigned to the DST system wastes through the DST Part A, Form 3 documentation, is not routinely assigned to "secondary" waste, such as that reported under these treatability groups. For this "secondary" waste reported here, 2,4,5-trichlorophenol is not present at a concentration that would require designation with the waste number D041. No change to the report is planned in response to this comment.

Comment #1-10: Page C-11, Table C-2, Potential Mixed Waste, Column F. In addition to this primary document review, and as part of Ecology's ongoing LDR compliance inspection, several discrepancies were noted. Specifically:

- 1) Column D: There is no documentation of the contents of the glovebox, yet the table reports that "mixed waste is not expected to be found in the glovebox/hood."
- 2) Column F: Ecology inspectors were told that the USDOE assessment scheduled for August 2001 was not completed, and that the assessment was to be limited to a radiation survey in the general hot cell room areas by remote vehicle and was not intended to determine if the tanks in the hot cells were empty or not.
- 3) Column F: According to the CY 2000 LDR Report, the "one-time assessment," planned to inspect the cells and vessels, is not funded. However, Ecology inspectors were told that this assessment has been scheduled within 2002-2003.
- 4) Column G: The CY 2000 LDR Report does not provide any dates for characterization; however, Ecology inspectors were told that characterization is scheduled as part of the 2002-2003 activities.

5) Column G: The CY 2000 LDR Report states that deactivation is planned to be completed by 2014; however, negotiations have been suspended indefinitely.

Action #1-10a: Within 45 days, please revise the CY 2000 LDR Report to include a schedule for performing the TRUSAF assessment in accordance with USDOE-RL procedure #A&E-01, including a determination of the contents of the cells and vessels, and a schedule for characterization of the potential mixed waste.

Response #1-10a: The DOE storage assessment was started on October 9, 2001 and the results of RL assessment will be summarized, along with other assessments, as part of the discussion in the CY 2001 report. As agreed to during our October 17, 2001, meeting, additional discussions are required to establish how "within" year changes will be documented.

Since December 31, 2000, tremendous progress has been made at TRUSAF. This progress will be documented in the CY 2001 report along with updated schedules for entries and characterization. Fluor Hanford is performing the characterization work and is not associated with the storage assessment completed by RL. No change to the report is planned in response to this comment.

Action #1-10b: Within 45 days, please revise the CY 2000 LDR Report to include a schedule for negotiating deactivation of TRUSAF, or reference the commitment from USDOE, as noted in Ecology's Responsiveness Summary to Modification E to the Sitewide RCRA Permit (page 43), to develop and submit, for Ecology approval, a transition negotiation schedule for TRUSAF by December 31, 2001.

Response #1-10b: Characterization of the cells and vessels is scheduled to be complete by September 2003 and initiation of negotiations for transition is proposed by November 30, 2012. No change in the report is planned in response to this comment. A proposed change request is included at Enclosure 8.

Comment #1-11: Page B-33, Section 2.7. USDOE reported that a storage compliance assessment was scheduled for May 2001. However, Ecology inspectors were informed that this assessment has not been performed, and that USDOE was behind on the established schedule of assessments. Ecology considers each commitment and date provided in the LDR Reports to be binding and enforceable upon acceptance of the LDR Report as a final primary document.

Action #1-11: Within 45 days, please confirm the dates and commitments for assessments made in the CY 2000 LDR Report. Also, revise the CY 2001 LDR Report, as necessary, to accurately reflect commitments and dates for performing assessments in accordance with agreed-upon procedures (reference 6).

Response #1-11: As agreed to during our October 17, 2001, meeting, additional discussions are required to establish how "within" year changes will be documented. No change to the report is planned in response to this comment.

USDOE Assessments

CY1999 LDR Report

On December 20, 2000, USDOE provided supplemental information requested by Ecology to complete the requirements for CY 1999 LDR Reporting (reference 5). The supplemental information included the following procedures under which the USDOE assessments would be conducted:

Draft USDOE-RL procedure #A&E-01, revised 12/18/00 USDOE-ORP procedure #ORPID435.1, effective date 5/22/00.

On February 14, 2001, USDOE sent a letter to Ecology formalizing the agreements reached between the two agencies, including specific reference to the December 20, 2000 letter, and the procedures that cover LDR assessments (reference 6). Ecology concurred that the supplemental information was adequate/acceptable, and the CY 1999 LDR Report was accepted.

CY 2000 LDR Report

Ecology reviewed the following four DOE assessment reports in support of the primary document review process:

- Assessment of River Protection Project Mixed Waste Storage," #A-01-OPD-TANKFARM-0011, dated September-December 2000.
- "T-Plant Environmental Compliance Assessment," #A&E-00-ASS-072, dated November 11, 2000.
- "Assessment of 305-B Facility RCRA Compliance," #A&E-00-ASS-069, dated September 25, 2000.
- "241-Z Treatment and Storage Tanks Compliance Assessment," #A&E-00-ASSMT-074, dated February 20, 2001.

Assessment of River Protection Project Mixed Waste Storage

The assessment completed by USDOE-ORP on mixed waste storage in the Tank Farms (A-01-OPD-TANKFARM-0011), conducted between September and December 2000, did not adequately assess the compliance status of storage methods pursuant to applicable state and federal requirements for mixed waste storage. The following comments (#2-1 through #2-17) are with respect to USDOE-ORP's Tank Farm Assessment.

General Response for Comments #2-1 through #2-17 deals specifically with individual tankfarm assessment reports. DOE has not interpreted a requirement, either in ORPID 435.1, A&E-01, the M-26 milestone, or the Director's Final Determination, specifically directing the scope and content of individual assessment reports. The general citation in these comments from the director's final determination (section IV.A.2) refers to section 1.d in the Requirements for Hanford LDR plan" document, which requires DOE Assessment of the Compliance Status of Storage Methods pursuant to Applicable State and Federal Requirements. The CY 2000 LDR report has updated the plan to include a general assessment of the compliance status of the storage methods against applicable standards throughout many sections of the report. The final determination section IV (B) (c) states that the LDR report is the mechanism for reporting

DOE's storage method compliance assessment. The individual assessment reports that DOE has agreed to submit as supplementary information are not intended to provide any information beyond the scope stated for the given assessment, ORPID 435.1 section 5.2.2 states that a reviewer prepares for an evaluation by reviewing requirements based on the scope and type of activities being investigated. Section 5.2.4 of the ORPID allows flexibility in the conduct of evaluations using one or more of six methods. DOE determines compliance status based on many assessments. Compliance status from many assessments is summarized by exception (findings and observations) in the LDR Report (see Table 3-3).

Comment #2-1: Page 1, paragraph 4, reads in part, "The tank farms are composed of the SST and DST systems, both currently under RCRA interim status (WAC 173-303-400) and classified as treatment, storage, and disposal (TSD) units in the Tri-Party Agreement (except the Tri-Party Agreement specifically waives some of the tank system standards for SSTs)." (Final Determination, Section IV.A.2)

Action #2-1: Within 45 days, please provide Ecology with the citation(s) from the Tri-Party Agreement that "specifically waives some of the tank system standards for SSTs." Identify the specific tank system standards that DOE considers to be waived.

Response #2-1: Paragraph 4 of Tri-Party Agreement Milestone M-45-00 states in part "All parties recognize that the reclassification of previously identified RCRA past practice units to ancillary equipment associated with the TSD is strictly for application of a consistent closure approach." The milestone further explained that upgrades to this equipment to achieve compliance with interim status technical standards would not be mandated. These SST systems were the subject of the paragraph in question. The use of the term "waives" in the assessment report may have been confusing because of the connotation with a formal waiver process. Further discussion of the issue is presented in section 4.17 of the assessment.

Comment #2-2: Section 4.4, Contingency Plan. DOE-ORP appears to have reviewed the 242-T and 242-S Evaporators with respect to emergency response. However, it is unclear as to whether or not DOE-ORP assessed the DST system, including the 204-AR Waste Unloading Facility, and SST systems (identified in Table 1) against the requirements of WAC 173-303-340 through -360. (Final Determination, Section IV.A.2)

Action #2-2: Within 45 days, please provide Ecology with information as to DOE-ORPs assessment of the DST and SST systems (identified in Table 1) against the requirements of WAC 173-303-340 through -360. Please provide any supporting documentation developed by the assessment team.

Response #2-2: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change in the report is planned in response to this comment.

Comment #2-3: Section 4.5, Inspections. DOE-ORP appears to have reviewed some of the SSAs with respect to inspections. However, it is unclear as to whether or not DOE-ORP assessed the DST and SST systems (identified in Table 1) against the requirements of

WAC 173-303-320 and applicable portions of 40 CFR 265, Sub-part J. (Final Determination, Section IV.A.2)

Action #2-3: Within 45 days, please provide Ecology with information as to DOE-ORP's assessment of the DST and SST systems (identified in Table 1) against the requirements of WAC 173-303-320 and applicable portions of 40 CFR 265, Sub-part J. Please provide any supporting documentation developed by the assessment team.

Response #2-3: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change in the report is planned in response to this comment.

Comment #2-4: Section 4.6, Personnel training and qualifications. DOE-ORP appears to have reviewed training records and the written training plan. However, it is unclear as to whether or not DOE-ORP assessed the actual completion of courses by workers against the courses described in the written training plan in accordance with WAC 173-303-330(2)(c). (Final Determination, Section IV.A.2)

Action #2-4: Within 45 days, please provide Ecology with information as to whether or not DOE-ORP assessed the actual completion of courses by hazardous waste workers against the courses described in the written training plan per WAC 173-303-330. Also, please identify the number of hazardous waste workers whose training records were reviewed.

Response #2-4: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change in the report is planned in response to this comment.

Comment #2-5: Section 4.7, Characterization. Page 15, last paragraph, reads in part, "The DST WAP addresses safe storage, designation, and LDR issues as required by WAC 173-303-400 and WAC 173-303-300. However, whether the WAP addresses the full universe of data needs to treat and/or dispose of the waste was not included in the scope of this assessment." (Final Determination, Section IV.A.2)

Action #2-5: Within 45 days, please perform a follow-up assessment at the DST and SST Tank System to assess whether or not the WAP addresses the full universe of the data needs to adequately store, treat, and/or dispose of the waste in the DST and SST system. Please provide Ecology with information as to DOE-ORP's assessment of the DST and SST compliance with waste analysis plan requirements of WAC 173-303-300 and the waste characterization requirements of the Requirements for Hanford LDR Plan. Please provide any supporting documentation developed by the assessment team. Ecology expects that omissions in the WAP or inadequate implementation of the WAP be addressed in the corrective measures portion of USDOE's assessment report, and may also be addressed in the associated plans and schedules included in the LDR Report.

Response #2-5: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change in the report is planned in response to this comment.

Comment #2-6: Section 4.7, Characterization. Page 16, paragraph 1, reads in part, "The SST system does not receive waste from other tanks or sources, a WAP is not required. Ecology is curious about this statement given that USDOE operates the SST system under the interim status standards referenced in WAC 173-303-400, which includes WAC 173-303-300, General Waste Analysis. (Final Determination, Section IV.A.2)

Action #2-6: Within 45 days, please provide Ecology with information as to DOE-ORP's assessment of the SST system against the requirements of WAC 173-303-300. Please provide any supporting documentation developed by the assessment team.

Response #2-6: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change in the report is planned in response to this comment.

Comment #2-7: Section 4.7, Characterization. DOE-ORP appears to have reviewed written waste analysis plans and a waste acceptance criteria document. However, it is unclear as to whether or not DOE-ORP assessed the actual implementation of these documents against the requirements of WAC 173-303-300, e.g., that a detailed chemical, physical, and/or biological analysis was obtained before treating, storing, or disposing of the waste, that the analysis must contain the information necessary to manage the waste in accordance with the requirements of chapter 173-303 WAC, that any methods and frequencies described in the written training plan were followed. (Final Determination, Section IV.A.2)

Action #2-7: Within 45 days, please provide Ecology with information as to whether or not DOE-ORP assessed the actual implementation of the written waste analysis plans and waste acceptance criteria for the DST and SST system. Please identify the specific waste streams that were assessed. Please provide any supporting documentation developed by the assessment team.

Response #2-7: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change in the report is planned in response to this comment.

Comment #2-8: Section 4.8, Operating Logs and Logkeeping Practices. DOE-ORP appears to have reviewed a limited number of logs in the field. However, it is unclear as to whether or not DOE-ORP assessed the DST and SST facility operating record against the recordkeeping requirements of WAC 173-303-380. (Final Determination, Section IV.A.2)

Action #2-8: Within 45 days, please provide Ecology with information as to DOE-ORP's assessment of the DST and SST operating record against the recordkeeping requirements of

WAC 173-303-380. Please provide any supporting documentation developed by the assessment team.

Response #2-8: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change in the report is planned in response to this comment.

Comment #2-9: Section 4.9, Security. DOE-ORP appears to have reviewed several security measures at the SST and DST farms. However, it is unclear as to DOE-ORP's assessment of the security measures against the security requirements of WAC 173-303-310. Again, it is difficult to determine whether or not DOE-ORP assessed the actual implementation of these requirements in the field (e.g., that signs were posted, that barriers are in place), or if the procedures were reviewed to determine if the requirements were included. (Final Determination, Section IV.A.2)

Action #2-9: Within 45 days, please provide Ecology with information as to DOE-ORP's assessment of the DST and SST security measures against the security requirements of WAC 173-303-310. Please provide any supporting documentation developed by the assessment team.

Response #2-9: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change in the report is planned in response to this comment.

Comment #2-10: Section 4.11, Corrective Action. DOE-ORP appears to have reviewed corrective action as part of the DST and SST Assessment. However, it is unclear as to DOE-ORP assessed corrective action against the requirements of WAC 173-303-646 and any corrective action measures being implemented at the Tank Farms. (Final Determination, Section IV.A.2)

Action #2-10: Within 45 days, please provide Ecology with information as to DOE-ORP's assessment of corrective action against the requirements of WAC 173-303-646 and any corrective action measures being implemented at the Tank Farms. Please provide any supporting documentation developed by the assessment team.

Response #2-10: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change in the report is planned in response to this comment.

Comment #2-11: Section 4.13, Reporting. DOE-ORP appears to have reviewed reporting procedures and determined that "notifications are made as required." However, it is unclear as to DOE-ORP's assessment of the reporting activities against WAC 173-303-390, the Requirements for Hanford LDR Plan, and the actual implementation of these requirements in the field. (Final Determination, Section IV.A.2)

- Action #2-11: Within 45 days, please provide Ecology with information as to DOE-ORP's assessment of the DST and SST reporting activities against the facility reporting requirements of WAC 173-303-390 and Section 1.d. of the Requirements for Hanford LDR Plan. Please provide any supporting documentation developed by the assessment team.
- Response #2-11: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change in the report is planned in response to this comment.
- Comment #2-12: Section 4.14, Reporting. DOE-ORP appears to have reviewed the waste minimization program for the tank farm contractor. However, it is unclear as to DOE-ORP's assessment of the waste minimization requirements against the Requirements for Hanford LDR Plan (EPA/Ecology, April 10, 1990), and the actual implementation of these requirements in the field.
- Action #2-12: Within 45 days, please provide Ecology with information as to DOE-ORP's assessment of the DST and SST waste minimization activities against the waste minimization requirements of the Requirements for Hanford LDR Plan. Please provide any supporting documentation developed by the assessment team.
- Response #2-12: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change in the report is planned in response to this comment.
- Comment #2-13: General Waste Management Activities, page A-13: The DOE-ORP assessment team appears to have questioned the contractors as to the potential for dangerous or mixed waste in various buildings (e.g., 241-A-431, 241-AX-501, 271-CR/CRL Building). In several cases, the contents of these buildings were unknown or scheduled to be assessed. However, these potential mixed wastes do not appear on the "Potential Mixed Waste Table." (Final Determination, Section IV.A.1 and 2)
- Action #2-13: Within 45 days, please review the accuracy of the CY2001 LDR Report to ensure that all mixed waste or potential mixed waste at Hanford has been identified. Revise the Potential Mixed Waste Table and/or LDR Waste Stream Profile Sheets accordingly.
- Response #2-13: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change in the report is planned in response to this comment.
- Comment #2-14: It is unclear as to whether or not DOE-ORP's assessment included review of the following state and federal regulations as they relate to waste storage: 40 CFR 265 Sub-part J (Tank Systems), WAC 173-303-140 (Land disposal restrictions), WAC 173-303-280 (General requirements for dangerous waste management facilities), WAC 173-303-283 (Performance

standards), as well as applicable milestones for compliant waste storage established in the Tri-Party Agreement. (Final Determination, Section IV.A.2)

Action #2-14: Within 45 days, please provide Ecology with information as to DOE-ORP's assessment of the DST and SST storage methods against the state and federal regulations and applicable Tri-Party Agreement milestones identified in Comment #2-14. Please provide any supporting documentation developed by the assessment team.

Response #2-14: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change in the report is planned in response to this comment.

Comment #2-15: In February 2001, the USDOE and Ecology reached agreement on the criteria for USDOE to perform assessments of the compliance status of the storage methods (per Final Determination, Section IV.3.A.2) (reference 6). Please note that Ecology's expectations for CY 2001 assessments are that they follow the procedures submitted to Ecology on December 20, 2000 (Steve Wisness, USDOE, to Mike Wilson, Ecology, 01-A&E-032). It is unclear as to whether or not DOE-ORP followed Waste Storage Evaluation procedure #ORPID 435.1. This procedure was not specifically referenced in the tank farm assessment report. (Final Determination, Section IV.A.2)

Action #2-15a: Within 45 days, please report to Ecology as to whether or not procedure ORPID 435.1 was used and followed in developing and conducting this assessment.

Response #2-15a: The version of ORPID 435.1 (Draft) provided to Ecology in December 2000 (letter reference above) was inadvertently given the May 22, 2000, date. This procedure was NOT the one used to conduct the CY 2000 LDR assessments but is a revision to the one used to conduct them. In each revision, the pertinent section on the methods employed in conduct of assessments remained the same. The original version used to conduct the assessments was substantially unchanged except that language in the later version provided to Ecology stipulated that a review of contractor mixed waste storage self-assessments and a survey of reusable equipment would be conducted annually. The procedure used can be provided to Ecology upon request. No change to the report is planned in response to this comment.

Action #2-15b: If the ORPID 435.1 procedure was followed (Action #14a, above), within 45 days, please:

- 1) Provide Ecology with the Master Assessment Plan developed by ORP to conduct assessment A-01-OPD-TANKFARM-0011, per Section 5.2.1 and 5.2.2
- 2) Provide Ecology with documentation showing that the results of the evaluations were transmitted to the contractor for corrective action as necessary. Also, please provide documentation confirming that actions taken as a result of the assessment are being tracked to completion in accordance with established procedures and processes under QAPP-101.

Response #2-15B: At the time of this assessment the schedule submitted with the December 20, 2000, letter for assessments to be conducted, as well as the facility representative assessment schedule, combined to form the master assessment plan. Subsequent to that, an assessment program plan and implementing documents were developed and can be provided to Ecology upon request. No change to the report is planned in response to this comment.

Comment #2-16: Several schedules for DOE-ORP assessments of the DST and SST systems were provided via the Location Specific Data Sheets. Ecology considers each commitment and date provided to be binding and enforceable. (Final Determination, Section IV.A.2)

Action #2-16: Please confirm the dates and commitments made in the CY 2000 LDR Report. Also, please confirm that the dates and commitments made in the CY 2000 LDR Report are reflected in the direction provided to the responsible contractor.

Response #2-16: As agreed to during the DOE/Ecology October 17, 2001, meeting, discussions will continue to address how "within" year changes will be documented. No change to the report is planned in response to this comment.

Comment #2-17: Page 3-3 of the CY 2000 LDR Report provides a summary of the ORP Assessment Results. In addition to the comments on this assessment report provided above, please explain how no findings and observations were noted for the known non-compliant situations that exist at the Tank Farms. Milestones are in place to address many non-compliant situations at the Tank Farms. There are also USDOE reports, such as the Hanlon reports, that identify tanks that are known to be leaking or to have leaked in the past. Situations that are not currently in compliance with state and federal regulations for waste storage must be reported in assessments. References to existing compliance agreements can then be referenced. (Final Determination, Section IV.A.2)

Action #2-17: Within 45 days, please review the ORP Assessment Results and revise the CY 2000 LDR Report, as necessary, to accurately report the compliant status of the Tank Farms with respect to state and federal regulations for waste storage.

Response #2-17: ORP conducted their assessments in accordance with the ORPID435.1 procedure. Specific comments are considered beyond the scope of the LDR Report. ORP will meet with Ecology to discuss issues/concerns or content of these assessments. No change to the report is planned in response to this comment.

Comment #2-18: As noted above, in February 2001, the USDOE and Ecology reached agreement on the criteria for USDOE to perform assessments of the compliance status of the storage methods (per Final Determination, Section IV.3.A.2) (reference 6). DOE-RL procedure #A&E-01 forwarded to Ecology via the December 20, 2000 letter was in draft form. It is unclear as to whether or not DOE-RL followed procedure A&E-01 for T-Plant and 305-B assessments. This procedure was not specifically referenced in the DOE-RL assessment reports, and it is unclear as to whether or not procedure #A&E-01 was used and followed. (Final Determination, Section IV.A.2)

Action #2-18a: Within 45 days, please report to Ecology as to whether or not procedure #A&E-01 was used and followed in developing and conducting the DOE-RL assessments for T-Plant and 305-B. Also, if DOE-RL procedure A&E-01 was not used and followed, please provide the procedure that was used and followed in developing and conducting the DOE-RL assessments noted above.

Response #2-18a: Yes the A&E-01 procedure was followed during the RL assessments. No change to the report is planned in response to this comment.

Action #2-18b: Within 45 days, please provide Ecology with the current (final) version of DOE-RL procedure #A&E-01.

Response #2-18b: The procedure was provided to Ecology on December 20, 2000. No change to the report is planned in response to this comment.

241-Z Treatment and Storage Tanks Compliance Assessment

The 241-Z Treatment and Storage Tanks Compliance Assessment is dated February 20, 2001. As such, it is Ecology's expectation that DOE-RL used procedure A&E-01 in developing and conducting the 241-Z assessment. The following comment (#2-19) is with respect to USDOE-RL's 241-Z Assessment.

Comment #2-19: It is unclear as to whether or not DOE-RL's assessment included review of the following state and federal regulations as they relate to waste storage at the 241-Z storage tanks: 40 CFR 265 Sub-part J (Tank Systems), WAC 173-303-280 (General requirements for dangerous waste management facilities), WAC 173-303-283 (Performance standards), WAC 173-303-360 (Emergencies), and WAC 173-303-390 (Facility reporting). (Final Determination, Section IV.A.2)

Action #2-19a: Within 45 days, please provide Ecology with information as to DOE-RL's assessment of the 241-Z storage tanks against the state and federal regulations identified in Comment #2-19. Please provide any supporting documentation developed by the assessment team.

Response #2-19a: RL conducted their assessments in accordance with the A&E-01 procedure. Specific comments are considered beyond the scope of the LDR Report. RL will meet with Ecology to discuss issues/concerns or content of these assessments. No change to the report is planned in response to this comment.

Action #2-19b: Within 45 days, please provide Ecology with documentation showing that the results of the assessments were formally transmitted to the contractor for appropriate corrective actions as necessary. Also, please provide documentation confirming that corrective actions taken as a result of the reviews are being tracked to completion in accordance with RIMS performance improvement management system, and with established contractor procedures and processes.

Response #2-19b: RL conducted their assessments in accordance with the A&E-01 procedure. Specific comments are considered beyond the scope of the LDR Report. RL will meet with Ecology to discuss issues/concerns or content of these assessments. No change to the report is planned in response to this comment.

Treatment Plan Requirements and Characterization Plan Requirements

Comment #3-1: HFFACO Change Control Form, Change #M-026-01-01. The draft change control form does not adequately include milestones and associated schedules for characterization and/or treatment requirements for mixed wastes, pursuant to the Final Determination. After reviewing an early draft of the CY 2000 report, Ecology sent a letter to USDOE on April 19, 2001, communicating expectations for the CY 2000 LDR Report and expressing concern that the draft was insufficient. On March 28, 2001, USDOE also sent a letter to Fluor Hanford, Inc., stating their concern with a "lack of proposed dates, schedules, and milestones for characterization and treatment for many of the treatability groups" (Final Determination, Section IV.A.3)

The HFFACO Change Control Form does propose to treat a projected volume of 7795 cubic meters of mixed waste to be treated. Page 3-2, Section 3.1, states that the 7795 cubic meters represents the baseline plan for treatment of waste through the end of 2006 for categories MLLW-01 through 10. Based on very rough calculations of the mixed waste currently reported in the CY 2000 LDR Report as stored and projected for MLLW-01 through MLLW-10, the 7795 cubic meters would account for treatment of approximately 69%-88% of the waste from these streams. (The range is dependent on the unanswered question as to the definition of "LDR compliant" waste, i.e., if this waste need treatment. See Comment/Action #3-7, below.) Ecology is encouraged with the commitments made regarding treatment of MLLW-01 through MLLW-10 streams. However, several streams, including some under MLLW-01 through 10, do not have adequate characterization schedules. Several streams do not have adequate treatment schedules. (Final Determination, Section IV.A.3)

Action #3-1: Within 45 days, please revise the CY 2000 LDR Report to include specific schedules and milestones for characterization (by waste stream) or treatment (by treatability group) for all waste streams for which no specific schedules and milestones were provided. This can be done by either revising the proposed change control form submitted with the CY 2000 report, by including a specific schedule for characterization in Section 2.11 of the Location Specific Data Sheets or for treatment in Section 4.4 of the Treatability Group Data Sheets, or by proposing a milestone negotiation date.

Response #3-1: It should be noted that the Final Determination does not require that schedules and milestones be developed by "waste stream" or by "treatability group." It is anticipated that by FY 2012, the majority of the stored, contact-handled MLLW inventory in the Central Waste Complex will have been characterized, treated, and disposed. Some small, unique waste streams will likely be stored awaiting the availability of treatment, and a relatively small volume of MLLW will be in storage at any given time to allow accumulation of sufficient volumes to support treatment campaigns. No change to the report is planned in response to this comment. A proposed change control package is attached as Enclosure 8.

Comment #3-2: Page 3-22, Table 3-12, Characterization Schedule for Mixed Waste. Table 3-12 contains characterization schedules for a portion of waste within the MLLW-01 through MLLW-07 treatability groups. Ecology will consider each commitment and date provided in this column to be binding and enforceable upon acceptance of the LDR Report as a final primary document. In addition, the characterization schedules do not account for the total characterization needs for these groups, e.g., the Location Specific Data Sheet for MLLW-02/CWC (Page B-269, Section 2.11) states that additional characterization is needed for the 2950 cubic meters of this mixed waste currently stored at CWC. Table 3-12 only schedules characterization for 398 cubic meters of MLLW-02 waste, for all MLLW-02 waste streams, over the next five years. (Final Determination, Section IV.A.3)

Action #3-2: Within 45 days, USDOE may choose to include in the CY 2000 LDR Report a proposed change package that reflects the commitments made in Table 3-12 in specific milestones. This is not a required change. Ecology does ask that USDOE review these commitments and provide a statement to Ecology that the commitments are sound and are integrated with and complement existing schedules, milestones, and commitments for these treatability groups. In addition, as noted in Comment/Action #3-1 above, characterization schedules are needed for all waste streams for which no specific schedules or milestones were provided.

Response #3-2: In the specific example given, Ecology is correct in stating that the location-specific data sheet for MLLW-02/CWC (Page B-269, Section 2.11) is marked "yes," indicating that further characterization is needed for this waste stream. However, further characterization is not needed for the entire 2950 m³, only for a portion of this volume. The text of Section 2.11 states, "If necessary to provide further characterization..." and refers the reader to the CY 2000 LDR Report, Volume 2, for further details.

The data in the CY 2000 LDR Report, Volume 2, Table 3-12 are correct. It is estimated that 212 m^3 (of the 2950 m^3) will require additional characterization. Of the 212 m^3 , 186 m^3 has been scheduled for characterization in FY 2003. The remaining 26 m^3 of MLLW-02 will be characterized after FY 2006.

The need for characterization schedules for all waste streams for which no specific schedules or milestones were provided is addressed in Response #3-1.

It should be noted that characterization activities are inherent to waste treatment schedules. Commitments for treatment also constitute commitments for completing requisite characterization activities for those wastes being treated; it appears that there would be no value-added to specify schedules for both activities.

Comment #3-3: Page 4-6, paragraph one, references document HNF-EP-0063, and states, "This document specifies waste characterization criteria necessary to support proper interim storage and future processing, storage, and/or disposal requirements for TRU and TRUM waste." (Final Determination, Section IV.A.3)

Action #3-3: Within 45 days, please provide Ecology with a copy of document #HNF-EP-0063, or the portions therein, that specify waste characterization criteria necessary to support proper

interim storage and future processing, storage, and/or disposal requirements for TRU and TRUM waste."

Response #3-3: A copy of the Hanford Site Solid Waste Acceptance Criteria, HNF-EP-0063, Rev. 6 is available to Ecology at http://www.hanford.gov/wastemgt/wac/docs/hnf-ep-0063/hnf-ep-0063-6.pdf. Characterization criteria that may apply to TRU and TRU mixed waste are necessarily found throughout this document. The portions most pertinent to TRU and TRU mixed waste are Section 2, Section 5, Appendix A, Appendix B, and Appendix G. No change to the report is planned in response to this comment.

Comment #3-4: Page 8-4, Table 8-1, Summary of Treatment Information for Each Treatability Group. This table is very helpful by providing a clear grouping of information. It is easy to see which treatability groups do and do not have Tri-Party Agreement milestones, and which have adequate schedules. Regarding the TRUM treatability groups, Ecology explained in a letter to USDOE dated April 19, 2001 that specific schedules and/or milestones are needed for streams in which the need for further characterization and/or treatment is known at this time. Examples included streams that need further characterization in order to be sent to WIPP. (Final Determination, Section IV.A.3)

Action #3-4: As noted in Comment/Action #3-1 above, characterization schedules are needed for all waste streams for which no specific schedules or milestones were provided, including the TRUM streams destined for WIPP.

Response #3-4: The Tri-Party Agreement M-0091 negotiations include milestones for the processing of TRUM. When available, these will be included in annual updates of the LDR Report. (Refer to Response #3-1) No change to the report is planned in response to this comment.

Comment #3-5: Page 8-4, Table 8-1, Summary of Treatment Information for Each Treatability Group, as well as many individual treatability group data sheets, refer to milestones that do not provide the specific data needed for scheduling waste stream treatment, and do not explain coordination with new commitments provided within the CY 2000 LDR Report. For example, the Treatability Group Data Sheet for MLLW-03 cites M-0091-12 and 12A as applicable milestones for treatment. These two milestones, combined, require treatment of 600 cubic meters of waste; however, are not specific to MLLW-03. The proposed milestone package and associated information provided with the CY 2000 LDR Report commits to treatment of 7795 cubic meters of waste, of which an undefined amount is attributed to treatment of MLLW-03 waste. It is very difficult to track commitments for treatment given the information provided. Another example: The Treatability Group Data Sheet for K Basin Sludge and Table 8-1 cite M-091 as the applicable milestone series with planned treatment based on WIPP closure in approximately 2035. This information is insufficient. Further, the M-091 milestones regarding K Basin sludge, to this point, only address waste acceptance and storage, leaving no schedules and milestones in place for treatment. Specific schedules and milestones are needed to address treatment needs. (Final Determination, Section IV.A.3)

Action #3-5: Within 45 days, please clarify the specific schedules and milestones for treatment (by treatability group) for all waste streams for which specific schedules and milestones were

provided or already exist. Revise the CY 2000 LDR Report, as needed, to accurately reflect information regarding treatment schedules for these treatment groups.

Response #3-5: Milestones for processing TRUM waste are being discussed as part of the Tri-Party Agreement M-091 milestone negotiations. The outcome from the negotiation will be included in the next annual update of the report. No change to the report is planned in response to this comment.

Comment #3-6: As noted in Ecology's letter in response to USDOE's submittal of the CY1999 LDR Report (reference 4), which provided comments on the proposed 2001 (CY 2000) LDR Report, Ecology noted concern with USDOE's statements that no further characterization for designation and storage under LDR is required for DST and SST waste. This statement appears again in USDOE's CY 2000 LDR Report. The sampling and analysis agreements reached between USDOE and Ecology in the Regulatory DQO (PNNL-12040) were specifically created to satisfy the following "Statement of the Problem":

"There is a considerable knowledge base regarding the tank waste. However, it has not been compiled or verified to establish that sufficient information exists to meet RCRA compliance requirements. This information is needed for meeting generator compliance requirements and providing adequate information for the treatment plant risk assessment work plan development.

In particular, it has not been established that existing waste characterization data will meet waste generator characterization requirements as stated under WAC 173-303. The Washington State program includes the entire federal program. Thus, all subsequent citations will reference federal requirements for clarity purposes (40 CFR 268.7, "Land Disposal Restrictions, Waste Analysis and Recordkeeping," and 40 CFR 261, "Identification and Listing of Hazardous Waste.") Ecology has determined that all state-only LDR will be met through vitrification."

As noted in the Regulatory DQO Statement of the Problem, USDOE and Ecology have formally acknowledged that the DST and SST tank waste has not been adequately characterized in compliance with generator requirements for LDR. (Final Determination, Section IV.A.3)

Action #3-6a: Within 45 days, identify specific schedules and milestones for characterization of DST and SST waste streams. This can be done by either revising the proposed change control form submitted with the CY 2000 report, or by including specific schedules for characterization in Section 2.11 of the Location Specific Data Sheets.

Response #3-6a: DOE has been actively implementing the Regulatory DQO (PNNL-12040) in a stepwise fashion stipulated in Section 8.0 of the DQO. We are nearing completion of activities required under Step 1, Method Selection and Validation, and have initiated activities in Step 2, Complete Implementation, that are allowed to be conducted concurrently with Step 1. DOE and Ecology meet on a monthly basis on the status, findings, and schedules for this effort. Meeting minutes are compiled and submitted to Ecology and the Administrative Record. The requested schedules are available as attachments to these meeting minutes. The waste feed to the River Protection Project (RPP) Waste Treatment Plant (WTP) will be characterized prior to

acceptance by the RPP-WTP outside the five-year window of the CY 2000 LDR Report. The RPP Expanded Management Summary Recovery Schedule Milestone 255, Initiate transfer of first LAW feed to the WTP, is scheduled for first quarter of fiscal year 2007, is beyond the five-year window for the CY 2000 LDR Report.

Ecology's concern with USDOE's statements that no further characterization for designation and storage under LDR is required for DST and SST waste is again noted. This was a topic of much interest during the DQO process that is embodied in the Regulatory DQO and was addressed further in the document. In Section 1.1, the Regulatory DQO states, "Ecology has determined that DOE, the waste generator, has adequately designated the existing waste." It was also recognized in Section 1.1 that data needs for future waste management activities will need to be addressed, "Ecology and DOE have agreed that additional tank waste characterization data would facilitate permitting and compliance activities for treatment and disposal of the waste." Further, in Section 2 of the Regulatory DQO, it was recognized that, "Data requirements for treatment facility operations and immobilized waste forms will be established under the Hanford Site-wide permit (WA 7890008967) through the permit modification process." Finally, it should be noted that the WAP in the draft Dangerous Waste Permit Application for the WTP was incorporated in the Regulatory DQO and includes provisions that the waste feed meet their waste acceptance criteria prior to receipt at the facility for treatment.

Characterization is adequate for safe storage. Characterization activities for other drivers continue. Therefore no further milestones are planned at this time. No change to the report is planned in response to this comment.

Action #3-6b: Within 45 days, please revise the CY 2000 LDR Report to remove statements that suggest the DST and SST wastes are adequately characterized for LDR storage.

Response 3-6b: As stated above, the waste in the DST and SST is adequately characterized for safe and compliant storage. Based on the discussion in Section 1.1 of the DQO, no change to the report is planned in response to this comment.

Comment #3-7: Page B-222, Section 2.11, asks "Is further characterization necessary?" USDOE reported "yes," that waste will be re-evaluated prior to treatment if further characterization is necessary. Yet, the waste stream is defined as "LDR Compliant Waste." Contrary to this information, page 3-17, section 3.1.10, states in part, "A second treatability group that does not require treatment is MLLW-01, LDR Compliant Waste." (Final Determination, Section IV.A.3)

Action #3-7: Within 45 days, please provide Ecology with a definition of "LDR Compliant Waste." Specifically, report as to the potential characterization and treatment needs with regard to "LDR Compliant" waste streams. Revise the CY 2000 LDR Report, as needed, to accurately reflect information regarding characterization and treatment requirements for MLLW-01.

Response #3-7: The definition of "LDR compliant waste" means that a waste meets Washington State regulations for disposal as specified in WAC 173-303-140. Other disposal facility requirements not mandated by the regulations, such as minimum void space requirements, may

still need to be evaluated prior to disposal. It was anticipated that the waste stream might require additional characterization to either confirm LDR compliance or to confirm that other disposal facility requirements were being met.

Although the answer of "yes" in response to the question regarding further characterization may seem to contradict the definition of the waste stream as "LDR Compliant Waste", it was intended to inform the reader that additional characterization might be pursued to confirm compliance with disposal unit requirements. The revised LDR Report Waste Location-Specific Data Sheet is included as Enclosure 6.

The data sheet should have stated that further characterization is planned just prior to <u>disposal</u> rather than <u>treatment</u>. The statement will be changed to read, "If necessary to provide further characterization, waste will be re-characterized just prior to <u>disposal</u> to ensure it meets current disposal requirements or, should further treatment be required due to changing regulations, for most efficient use of resources. Characterization of portions of this waste stream is currently scheduled for FY 2003."

Comment #3-8: Pages C-3 through C-37, Table C-2, Potential Mixed Waste. Column G contains many dates for planned activities for the various units. Some of these commitments have associated milestones; others do not. Ecology considers each commitment and date provided in this column to be binding and enforceable. (Final Determination, Section IV.A.3)

Action #3-8: Within 45 days, USDOE may choose to include in the CY 2000 LDR Report a proposed change package that reflects these commitments in specific milestones. This is not a required change. Ecology does ask that USDOE review these commitments and provide a statement to Ecology that the commitments are sound and are integrated with and complement existing schedules, milestones, and commitments for these units.

Response #3-8: The document was signed by the three DOE IAMIT representatives (RL Assistant Manager for Planning and Integration, DOE ORP Assistant Manager for Operations and the ORP Assistant Manager for Project Delivery). No further affirmation is required and no change to the report is planned in response to this comment.

Waste Minimization Requirements

Comment #4-1: Page B-26, Sections 3.2 and 3.3, ask about details of current and proposed methods for minimizing the generation of this waste and the bases and assumptions used. USDOE responded by stating that one of the methods for waste minimization is through evaporation of liquid waste. During a visit to T-Plant, Ecology inspectors discussed the use of evaporation as a waste minimization technique. Contractor personnel stated that the evaporation was the result of passive evaporation of liquid waste in the hot cells and not a genuine pollution prevention method. If such a technique was being used as a genuine waste minimization effort, it would likely constitute illegal disposal.

Action #4-1: Within 45 days, please revise the CY 2000 LDR Report to clarify the use of evaporation as a waste minimization technique at the 221-T tank system.

Response #4-1: Ecology is correct in the statement that evaporation of liquid waste is not a waste minimization technique. The evaporation is a passive mechanism due to the required ventilation of the cells in which the tanks are located, and has been discussed with Ecology T Plant Unit Manager numerous times during the RCRA Part B workshops, especially as it pertains to RCRA closure of the tank system. Information on the evaporation will be appropriately included in the Part B permit application. It is not an attempt at illegal disposal.

FH wanted to indicate somewhere on the data sheet that evaporation was occurring. This would avoid further questions raised by a reduction of nearly 3,000 gallons of waste volume each year. It was felt that given the fixed format of the data sheets, discussing evaporation in the waste minimization portion was the best option to clearly show the inevitable reduction in volume.

A revised data sheet that describes the waste reduction under Section 2.12, "Other key assumptions related to storage, inventory, and generation information." is included as Enclosure 7.

Enclosure 2

Response #1-2
LDR Report Waste Location-Specific Data Sheet
Page B-50

DOE/RL-2001-20 REV 0

LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET 2.7 DOE Storage Compliance Assessment information: Assessment has been completed. Reference to most recent assessment: Assessment has been scheduled. Scheduled date: ☑ Other. Explain: No assessment scheduled at this time Applicable Tri-Party Agreement milestones related to storage at this location: 2.8 **None** Has there ever been any non-permitted, unauthorized release of this stream to the environment? 2.9 ☐ Yes **∑** No If yes, summarize releases and quantities and provide date: 2.10 Are there any plans to submit requests for variances or other exemptions related to storage? ☐ Yes ☑ No If yes, explain: 2.11 Is further characterization necessary? ☐ Yes ☑ No ☐ Unknown at this time If yes, provide details and schedule (also see treatment/characterization plan volume for further information): If yes, provide Tri-Party Agreement milestone number(s): 2.12 Other key assumptions related to storage, inventory, and generation information: Waste forecast volumes identified for the 618-4 waste stream are dependent upon whether the work scope and funding are approved as part of the Work Plan for FY 2002 and subsequent years. 3.0 WASTE MINIMIZATION Has a waste minimization assessment been completed for this stream? 3.1 ☐ Yes ☑ No If yes, provide date assessment conducted: N/A If yes, provide document number or other identification: If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: This waste

stream is no longer generated.

Enclosure 3

Response #1-3
LDR Report Treatability Group Data Sheet
Page B-80

LDR REPORT TREATABILITY GROUP DATA SHEET

EPA/ State number	Waste description	LDR sub- category*	Concentration (typical or range)**	Basis	LDR Treatment Concentration Standard or Technology Code
UHC(4)	PCBs (sum of Aroclors)	NA	(5)	(5)	10 mg/l (6)
WP01	Persistent, EHW & DW	NA	(5)	(5)	NONE (3)
WP02	Persistent, DW	NA	(5)	(5)	NONE
WT01	Toxic, EHW & DW	NA	(5)	(5)	NONE (3)
WT02	Toxic, DW	NA	(5)	(5)	NONE

^{*}LDR subcategory marked NA if no existing subcategory adequately describes this waste, or if there are no defined subcategories for the waste number (40 CFR 268.40).

- 1) Radioactive high-level wastes generated during the reprocessing of fuel rods.
- 2) and meet 40CFR268.48.
- 3) Mixed extremely hazardous wastes can be land-disposed in Washington State in DOE facilities in accordance with RCW 70.105.050 (2).
- 4) UHCs which have been identified in waste entering the DST system since 1995. For more information see comments in 3.3.6
- (5) See Section 3.3.6
- (6) TCLP

Tank Waste is subject to non-wastewater treatment standards.

3.3.3	List any waste numbers from Section 3.3.2 for which the stream already meets established LDR treatment standards List:				
	☐ No LDR treatment required (e.g., TRUM waste destined for WIPP, exclusion, etc.)				
	∑ None (i.e., all constituents/waste numbers of this waste stream still require treatment)				
3.3.4	Does this waste stream contain PCBs?				
	▼ Yes □ No □ Unknown If no or unknown, skip to Section 3.3.5				
	3.3.4.1 Is waste stream subject to TSCA regulations for PCBs?				
	3.3.4.2 Indicate the PCB concentration range (ppm)				
	▼ <50 □ > 50 □ Unknown				

^{**}If the waste is not consistent in concentration or the concentration is unknown, this may not apply. Describe in Section 3.3.6.

Enclosure 4

Response #1-4
LDR Report Treatability Group Data Sheet
Page B-596

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LDR REPORT TREATABILITY GROUP DATA SHEET

		ory marked NA if no existing subcategory adequately describes this waste, or if there are no gories for the waste number (40 CFR 268.40).
	he waste i tion 3.3.6	s not consistent in concentration or the concentration is unknown, this may not apply. Describe
1) Ra	Idioactive	high-level wastes generated during the reprocessing of fuel rods.
3) M	ixed extre	CFR268.48 mely hazardous wastes can be land-disposed in Washington State in DOE facilities in h RCW 70.105.050 (2) 3.3.6
Tank	Waste is s	subject to non-wastewater treatment standards.
	3.3.3	List any waste numbers from Section 3.3.2 for which the stream already meets established LDR treatment standards
		☐ List:
		☐ No LDR treatment required (e.g., TRUM waste destined for WIPP, exclusion, etc.)
		☑ None (i.e., all constituents/waste numbers of this waste stream still require treatment)
	3.3.4	Does this waste stream contain PCBs?
		☐ Yes ☑ No ☐ Unknown If no or unknown, skip to Section 3.3.5
		3.3.4.1 Is waste stream subject to TSCA regulations for PCBs?
		Yes No Unknown
		3.3.4.2 Indicate the PCB concentration range (ppm)
		$\square < 50 \square \ge 50 \square \text{ Unknown}$
	3.3.5	What is the confidence level for the regulated contaminant characteristic data?
		☐ Low ☑ Medium ☐ High
	3.3.6	Comments on regulated contaminant characteristics and/or confidence level:
		The wastes in the SSTs continue to be sampled, analyzed, and characterized. Waste was sent to the SST system prior to the enactment of LDR requirements, so pertinent LDR requirements were not documented. When SST system waste is transferred to the DST system, known LDR requirements are documented on profile sheets based on the Part A, Form 3 Permit Application for the SST system.
		4.0 WASTE STREAM TREATMENT
4.1	Is this	stream currently being treated? 🗆 Yes 😾 No
	If yes,	provide details:

Enclosure 5

Response #1-5
Appendix C, Potential Mixed Waste Table
Page C-1 and C-2

APPENDIX C POTENTIAL MIXED WASTE

The origin and definition of potential mixed waste is discussed in Section 2.3 of this volume. The content of each column is defined here:

Table C-1. Potential Mixed Waste Table Explanation.

Column	Column Title	Content Definition
A	Company,	Self-explanatory
Ĺ <u></u>	Project	
В	Common Name	Self-explanatory
	or Description	
С	Facility	Refer to the Hanford Site Atlas, BHI-01119, Rev-1, in print or at
	Number	http://www.bhi-erc.com/projects/p_m/eis/hgis/hgis.htm
D	Solid "Waste"	"Stuff" (e.g. equipment, materials) that is not currently in use
	with Potential	and for which no future use is currently known, but for which
1	for Mixed	the final disposition has not yet been determined. The "stuff" is
ł	"Waste" not	not currently considered mixed-waste and may or may not
	Integral to the	currently be contaminated, but includes items with the potential
}	Building or	for becoming mixed waste, depending on future decisions
	Structure (No	regarding their ultimate use and disposition. "Stuff" integral to
1	Use)	the building is not to be included. "None" in this column
		indicates the project/facility contains no "stuff" known to be in
E	Note sinte society	this category.
E	Materials with Potential to	"Stuff" (e.g. equipment, materials) that is currently in "standby"
}	Become Solid	and may at some point, if it becomes waste, designate as mixed
	Waste and	waste. Provide details for standby equipment/material that has a clear use or path for reuse/recycling, but may at some point, if
	Subsequently	/when it becomes waste, designate as mixed waste. Columns D
1	Mixed Waste	and E encompass contents of buildings and structures only.
	(In Standby,	Floor sweepings, dust, etc., are not included. The structures
1	Possible Use)	themselves, including contaminated walls, floors, etc., are
	1 Ossible Oscj	not included. Equipment and chemicals that are in use are
i	1	not included.
F	Assessment	Lists any assessments performed to show that waste or material
1	Method and	is in a condition protective of human health and the
	Frequency	environment. Also lists the frequency of the assessment.
		Assessments can be related back to specific material categories
		(e.g., D, E) as appropriate.
<u> </u>		LANGE CONTRACTOR OF FOREST CONTRACTOR OF STREET

Table C-1. Potential Mixed Waste Table Explanation.

ZWOIO V-1. I DEGILIAL ININGO WASHO ZWOIO ZWYTALIAGOL.			
Column Title	Content Definition		
Schedule for	Includes any schedule information relative to materials detailed		
Handling	in these columns. Includes references to pertinent documents		
Materials and	(closure plans, RODs) and identifies any applicable operable		
Schedule for	units or other Tri-Party Agreement drivers for remediation.		
Investigation	Specifies a date for addressing any data gaps regarding the waste		
Plan	(e.g., whether it is mixed, quantity, characterization, path-		
Discussions	forward decisions, other information that is needed to make		
	negotiations realistic and productive). A separate date for		
	starting negotiations with the regulators on a path forward for		
	the materials also is included.		
Integrating	Include factors that should be considered when determining		
Factors	when negotiations should occur. These include factors such as		
	relative threat to human health and the environment of no action,		
	ties to other activities such as operable unit remediation, ties of		
	action to facility missions, etc.		
	Column Title Schedule for Handling Materials and Schedule for Investigation Plan Discussions Integrating		

Enclosure 6

Response #3-7
LDR Report Waste Location-Specific Data Sheet
Page B-222 and B-223

DOE/RL-2001-20 REV 0

LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

	Totals 0.000
2.7	DOE Storage Compliance Assessment information:
	Assessment has been completed. Reference to most recent assessment:
-	✓ Assessment has been scheduled. Scheduled date: September 200☐ Other. Explain:
2.8	Applicable Tri-Party Agreement milestones related to storage at this location: None
2.9	Has there ever been any non-permitted, unauthorized release of this stream to the environment?
	If yes, summarize releases and quantities and provide date: NA
2.10	Are there any plans to submit requests for variances or other exemptions related to storage? Yes Z No
	If yes, explain: NA
2.11	Is further characterization necessary?
	☑ Yes ☐ No ☐ Unknown at this time
	If yes, provide details and schedule (also see treatment/characterization plan volume for further information): If necessary to provide further characterization, waste will be re-characterized just prior to disposal to ensure it meets current disposal requirements, or, should further treatment be required due to changing regulations, for most efficient use of resources. Characterization of portions of this waste stream is currently scheduled for FY 2003.
	If yes, provide Tri-Party Agreement milestone number(s): None
2.12	Other key assumptions related to storage, inventory, and generation information: None
	3.0 WASTE MINIMIZATION
3.1	Has a waste minimization assessment been completed for this stream? □ Yes ☑ No
	If yes, provide date assessment conducted: NA
	If yes, provide document number or other identification:
	If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: None

LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

planned waste not generated at CWC

- 3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):

 These activities occur before the wastes are shipped to CWC. There are few opportunities to reduce waste volumes placed into storage.
- 3.3 Waste minimization schedule
 - 3.3.1 Reduction achieved during calendar year (volume or mass):

0

3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2001	0.000		
2002	0.000)	
2003	0.000	1	
2004	0.000	•	
2005	0.000)	
Totals	0.000	· -	

- 3.3.3 Bases and assumptions used in above estimates:
 - . There is no projected waste generation by CWC.

Enclosure 7

Response #4-1
LDR Report Waste Location-Specific Data Sheet
Page B-25 and B-26

LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

	Totals	0.000			
2.7	DOE Storage C	Compliance Assess	ment information:		
	☑ Assessment l	has been completed	. Reference to most	recent assessment:	Oct. 2000, A&E-00-ASS 072
	☐ Assessment I	has been scheduled. ain: N/A	. Scheduled date:	Assessment currer	ntly scheduled for July 200
2.8	Applicable Tri- N/A	-Party Agreement	milestones related	to storage at this loc	ation:
2.9	Has there ever ☐ Yes ☑ No		mitted, unauthorize	d release of this stre	eam to the environment?
	If yes, summari N/A	ize releases and qua	antities and provide d	ate:	
2.10	Are there any p ☐ Yes ☑ No		quests for variances	or other exemption	s related to storage?
	If yes, explain:	N/A			
2.11	Is further char	acterization necess	sary?		
	□ Yes □ No	☑ Unknown at th	nis time		
	information):			characterization plan	
		of the 221-T RCRA op process with Ecol		e accomplished throu	igh the T Plant Complex
	If yes, provide	Tri-Party Agreemer	nt milestone number	(s):N/A	
2.12	Other key assu	mptions related to	storage, inventory	, and generation info	ormation:
	the T Plant Co An estimated 8 ventilation of t approximately the liquid fract discussed with	mplex Part B works a gallons per day are the cells in Building 3000 gallons (approxion will have evapor Ecology, and will and engineering co	shop process with Ece evaporating from the 221-T containing the eximately 11 cubic rorated in 5.8 years. The included in the Particular of	ology. ne waste currently in ne tank system. The en neters) per year. Associated associ	evaporation rate is suming this rate continues,

3.0 WASTE MINIMIZATION

DOE/RL-2001-20 REV 0

LDR REPORT WASTE LOCATION-SPECIFIC DATA SHEET

3.1	Has a	waste	minimization	assessment been	completed for	this stream?
-----	-------	-------	--------------	-----------------	---------------	--------------

☐ Yes ☑ No

If yes, provide date assessment conducted:

N.A.

If yes, provide document number or other identification:

N.A.

If no, provide date assessment will be completed, or if waste stream is no longer generated then indicate NA: N.A.

3.2 Provide details of current and proposed methods for minimizing the generation of this stream (e.g., process changes to reduce or eliminate LDR waste, methods to reduce volume through segregation and avoidance of commingling, substitution of less-toxic materials, etc.):

N.A. -- stream is no longer generated (see 2.12 of this data sheet).

- 3.3 Waste minimization schedule
 - 3.3.1 Reduction achieved during calendar year (volume or mass):

0 m3

3.3.2 Projected future waste volume reductions:

Year	m3	and/or	kg
2001	0.0	000	
2002	0.0	000	
2003 -	0.0	000	
2004	0.0	000	
2005	0.0	000	
Totals	. 0.0	000	

3.3.3 Bases and assumptions used in above estimates:

N.A.

Enclosure 8

Revised, Proposed Tri-Party Agreement Change Request

Change Number	Federal Facility Agreement and Consent Order	Date			
M-026-01-01	Change Control Form Do not use blue ink. Type or print using black ink.	0-4-1			
	Do not use oftic titk. Type of print using ofack titk.	October 29, 2001			
Originator	•	Phone:			
Astrid Larsen/Greg Sinton	- RL 37	2-0477/373-7939			
Class of Change:	·	ÿ.			
[]I - Signatories	[X] II - Executive Manager	I 1 III Decient Manage			
Change Title:	[N] II - Dicoutive transages	[] III - Project Manager			
	ixed Low-Level Waste (MLLW) in support of the Land Disposal Restrictions (I	~~~~~ ~~ ~~~~~			
Agreement Milestone M-2	YOUT	ДК) кероп (тп-гапу			
Description/Justification					
Descriptionsustratean	or Change:				
One of the LDR requireme	ents is to propose treatment and/or disposal milestones as part of the annual upda	- Caba I DD Danad			
These proposed treatment	and/or disposal milestones will be negotiated, approved and dispositioned throu	ate of the LDR Report.			
A greement Change Deque	and/of disposal functiones will be negotiated, approved and dispositioned dirought process described in Section 12 O of the Tri Bowle & William Addison Disposition of the Control of the	gh the Tri-Party			
and/or disposal milestones	st process described in Section 12.0 of the Tri-Party Agreement Action Plan. The will not be incorporated into the Tri-Party Agreement Action Plan.	he proposed treatment			
and/or disposal ninestones	will not be incorporated into the Tri-Party Agreement or project baseline as par	rt of the review and			
approval process of the ani	nual update of the LDR Report and are included here as information only.				
Adilantanas muanasad in a		₹			
Milestones proposed in si	apport of M-20-UIK:				
M-XX-01		•			
M-77-01					
Treat and/or dian.					
treat and/or dispo	ose of 7,795 m ³ of (i.e., pre-treatment volume) mixed, low-level waste (MLLW)	l .			
Desmand date: To					
Proposed date: Ju	ine 30, 2006				
3 4 300 00					
M-XX-02					
2					
Propose successor	r milestones for MLLW treatment and/or disposal for the July 1, 2006 through J	une 30, 2011,			
timeframe,					
Proposed date: In	ine 30, 2005				
Continued on page 2					
Impact of Change:					
<i>M</i>					
When agreement is reached	d on the proposed milestones and they are approved in accordance with Section	12.0 of the Tri-Party			
Agreement Action Plan, al	I treatability groups will be covered, in DOE's opinion, by either an existing Tri	i-Party Agreement			
Milestone or another regul	atory driver such as a RCRA permit.				
88888					
Affected Documents:					
 Hanford Federal Facil 	lity Agreement and Consent Order Action Plan Appendix D. Major and Interim	ı Milestones			
2) LDR	-				
Approvals:					
	Approved Disapproved				
DOE - W. W. Ballard, IA					
	·				
	Approved Disapproved				
EPA - D. R. Sherwood, IA					
·					
	Approved Disapproved				
Ecology - M. A. Wilson, I		· ·			

Draft Change Request for LDR M-026-01-01 Page 2

M-XX-03

Prepare a draft, detailed strategy for processing legacy and newly generated MLLW stored in the Central Waste Complex (CWC); update annually

Proposed date: October 31 of each year. First submittal will be in 2002

M-XX-04

Provide the updated Waste Management Strategic Plan to Ecology and EPA

Proposed date: December 31 of each year. First submittal will be in 2002

M-XX-05

Evaluate CWC storage capacity annually and provide a summary report to Ecology and EPA

Proposed date: February 28 of each year. First submittal will be in 2002.

M-XX-06

Begin negotiations of the path forward for the 701-A Ventilation Building and the 242-S and 242-T Evaporators

Proposed date: January 31, 2005

M-XX-07

Develop plan on how to fill data gaps and/or acquire the necessary data to make waste determination for the C855 (CAT) Substation/252 U Transformers, SNF Lend Bricks, Rad Storage Building/3711 Lead Bricks, and Waste Storage Building/2724 WB Radiators.

Proposed date: September 30, 2002

M-XX-08

Initiate TRUSAF deactivation negotiations by 2012 to support the 2014 schedule

Proposed date: June 30, 2012

M-XX-09

Characterize, treat and dispose of the majority of the contact-handled MLLW-01 through MLLW-10 inventory in the CWC. It should be noted that some small, unique waste streams will likely be stored awaiting the availability of treatment. In addition, a relatively small volume of MLLW-01 through MLLW-10 will be in storage at any given time to allow accumulation of sufficient volumes to support treatment campaigns.

Proposed date: September 30, 2012